

ABSTRACT

A protection circuit that permits the use of thin oxide transistor devices. In one embodiment, the circuit is used to protect internal nodes of a flash EEPROM chip from a power pad voltage. A thin oxide device can be used to directly couple the power pad to an internal node of the flash chip.

Optionally, thin oxide devices can also be used to set the steady state internal node voltage and a current source can be coupled to the node to bleed sub-threshold current. In yet

another embodiment, a pull down circuit is coupled to the node to pull the node immediately down to a desired steady state voltage when the EEPROM algorithm is completed.

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